

CLAIMS

1. Iron silicide powder, wherein the content of oxygen as the gas component is 1500ppm or less.
- 5 2. Iron silicide powder, wherein the content of oxygen as the gas component is 1000ppm or less.
3. Iron silicide powder according to claim 1 or claim 2, wherein the specific surface area is $0.15\text{m}^2/\text{g}$ or more.
4. Iron silicide powder according to claim 1 or claim 2, wherein the specific
10 surface area is $0.6\text{m}^2/\text{g}$ or more.
5. Iron silicide powder according to any one of claims 1 to 4, wherein the crystal structure of powder is substantially a ζ_α phase, or the primary phase is a ζ_α phase.
6. Iron silicide powder according to any one of claims 1 to 5, wherein the
15 content of impurities excluding gas components is 500ppm or less.
7. Iron silicide powder according to any one of claims 1 to 5, wherein the content of impurities excluding gas components is 50ppm or less.
8. Iron silicide powder according to any one of claims 1 to 5, wherein the content of impurities excluding gas components is 10ppm or less.
- 20 9. A manufacturing method of iron silicide powder, including the steps of reducing iron oxide with hydrogen to prepare iron powder, heating the iron powder and Si powder in a non-oxidizing atmosphere to prepare synthetic powder containing FeSi as its primary component, and adding and mixing Si powder once again thereto and heating this in a non-oxidizing atmosphere.
- 25 10. A manufacturing method of iron silicide powder according to any one of claims 1 to 9, including the steps of reducing iron oxide with hydrogen to prepare

iron powder, heating the iron powder and Si powder in a non-oxidizing atmosphere to prepare synthetic powder containing FeSi as its primary component, and adding and mixing Si powder once again thereto and heating this in a non-oxidizing atmosphere.

5 11. A manufacturing method of iron silicide powder according to claim 9 or claim 10, wherein, upon reducing the iron oxide with hydrogen, iron powder having a specific surface area of $0.2\text{m}^2/\text{g}$ or more is prepared by being reduced in a hydrogen gas stream of 600°C or less.

10 12. A manufacturing method of iron silicide powder according to claim 9 or claim 10, wherein, upon reducing the iron oxide with hydrogen, iron powder having a specific surface area of $0.2\text{m}^2/\text{g}$ or more is prepared by being reduced in a hydrogen gas stream of 500°C or less.